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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,455	11/20/2001	Ralph Gritzbach	269/142	8849

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SIEMENS SCHWEIZ AG
I-47, INTELLECTUAL PROPERTY
ALBISRIEDERSTRASSE 245
ZURICH, CH-8047
SWITZERLAND

EXAMINER	
COBANOGLU, DILEK B	
ART UNIT	PAPER NUMBER
3626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/988,455	GRITZBACH ET AL.	
	Examiner	Art Unit	
	DILEK B. COBANOGLU	3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7,9,10,12,13 and 16-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7,9,10,12,13 and 16-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/20/2001, 6/27/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/24/2008 has been entered.

2. Claims 1 and 12 have been amended; claims 6, 8, 11, 14-15, 19-20 have been canceled. Claims 1-5, 7, 9-10, 12-13, and 16-18 remain pending in this application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 7, 9-10, 12-13, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peifer et al. (hereinafter Peifer) (U.S. Patent No. 5,987,519), Oba (U.S. Patent No. 5,038,800), Zaitsu et al. (hereinafter Zaitsu) (U.S. Patent Publication No. 2002/0013551 A1), Peddicord et al. (hereinafter Peddicord) (U.S. Patent No. 6,402,691 B1), Surwit et al. (hereinafter Surwit)

(U.S. Patent No. 6,024,699) and further in view of David et al. (hereinafter David) (U.S. Patent No. 5,544,649)

A. Claim 1 has been amended now to recite a computerized medical diagnosis management system allowing a central operator to monitor and control predetermined number of diagnosis instruments in real time, comprising:

i. a central computer system comprising a data processor (Peifer; col. 3, lines 36-40);

ii. at least one data interface operatively coupled to the data processor and configured to receive data from the diagnosis instruments located at remote patient sites (Peifer; col. 3, line 66 to col. 4, line 3, col. 6, lines 37-40) in real time , wherein each diagnosis instrument is configured for displaying measurement data and/or diagnosis data on a local monitor allowing a local operator to monitor the diagnosis instrument at a patient site during a patient's examination;

iii. a display unit operatively coupled to the data processor and configured to represent each local monitor simultaneously, wherein the display unit is further configured to display the measurement data and/or diagnosis data in the same way as the respective local monitor, wherein a number of represented local monitors corresponds to the predetermined number of diagnosis instruments, and wherein the simultaneous representations of local

monitors on the display unit allow the central operator to monitor and control the diagnosis instruments during patient examinations; and

iv. an input unit operatively coupled to the data processor and configured to allow the central operator select a diagnosis instrument from the diagnosis instruments represented on the display unit and to generate a control code for the selected diagnosis instrument (Peifer; col. 3, line 66 to col. 4, line 13), when a control instruction for actively controlling the selected diagnosis instrument is entered by the central operator through the input unit to enable active intervention in real time by the central operator during a patient's examination; wherein the data interface automatically forwards the control code to the selected diagnosis instrument. (Peifer; col. 3, line 66 to col. 4, line 13)

(1) Peifer fails to expressly teach data interface receive data from the diagnosis instruments located at remote patient sites in real time. However, this feature is well known in the art, as evidenced by Surwit.

In particular, Surwit discloses data interface receive data from the diagnosis instruments located at remote patient sites in real time (Surwit; col. 7, lines 15-63, col. 9, lines 50-67).

It would have been obvious to one having ordinary skill in the

art at the time of the invention to include the aforementioned limitation as disclosed by Surwit with the motivation of to identify medical emergency situations that require immediate attention (Surwit; col. 9, lines 50-67).

(2) Peifer fails to expressly teach displaying measurement data and/or diagnosis data on a local monitor. However, this feature is well known in the art, as evidenced by Oba.

In particular, Oba discloses displaying measurement data and/or diagnosis data on a local monitor (Oba; abstract, col. 2, lines 54-56 and fig.2).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Oba with the motivation of displaying output on a bedside monitor (col. 3, lines 12-15).

(3) Peifer fails to expressly teach a display unit operatively coupled to the data processor and configured to represent each local monitor simultaneously, wherein a number of represented local monitors corresponds to the predetermined number of diagnosis instruments, and wherein the simultaneous representations of local monitors on the display unit allow the central operator to monitor and control the diagnosis instruments during patient

examinations. However, this feature is well known in the art, as evidenced by Peddicord.

In particular, Peddicord discloses a display unit operatively coupled to the data processor and configured to represent each local monitor simultaneously, wherein a number of represented local monitors corresponds to the predetermined number of diagnosis instruments, and wherein the simultaneous representations of local monitors on the display unit allow the central operator to monitor and control the diagnosis instruments during patient examinations (Peddicord; abstract, col. 2, lines 35-54, col. 4, lines 28-36).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Peddicord with the motivation of medical personnel can monitor a number of patients at a time (Peddicord; col. 10, lines 4-15).

(4) Peifer fails to expressly teach control instruction for actively controlling the selected diagnosis instrument is entered by the central operator through the input unit to enable active intervention in real time by the central operator during a patient's examination. However, this feature is well known in the art, as evidenced by Zaitsu.

In particular, Zaitsu discloses control instruction for actively controlling the selected diagnosis instrument is entered by the central operator through the input unit to enable active intervention in real time by the central operator during a patient's examination (Zaitsu; abstract, paragraphs 0018, 0019, 0057 and 0075).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Zaitsu with the motivation of the operator make decisions (Zaitsu; par. 0018) and correcting the errors (Zaitsu; par. 0074 and 0075).

(5) Peifer fails to expressly teach the display unit displays the measurement data and/or diagnosis data in the same way as the respective local monitor. However, this feature is well known in the art, as evidenced by David.

In particular, David discloses teach the display unit displays the measurement data and/or diagnosis data in the same way as the respective local monitor. (David; abstract, col. 4, line 66 to col. 5, line 20, col. 5, lines 22-59, col. 13, line 65 to col. 14, line 9, figures 5 and 6).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by David with the motivation of the

healthcare practitioner is able to interact with the patient as Criticare (item 100) monitors the patient (David; col. 14, lines 34-45).

B. Claim 2 recites the system as claimed in claim 1, wherein the data interface is a software module configured to access the diagnostic instruments based on addressing information for each diagnostic instrument (Peifer; col. 3, lines 60-65 and col. 4, lines 8-13).

C. Claim 3 recites the system as claimed in claim 1, wherein the data interface is configured as an Internet interface (Peifer; col. 3, lines 44-51).

D. Claim 4 recites the system as claimed in claim 1, wherein the system is configured to receive data from at least two diagnosis instruments that transmit data in dissimilar formats (Peifer; col. 3, lines 40-44 and col. 3, line 66 to col. 4, .line 3).

E. Claim 5 recites the system as claimed in claim 1, wherein the system is configured to receive data from a diagnosis instrument mounted on a mobile platform (Peifer; col. 5, lines 40-43).

F. Claim 7 recites the system as claimed in claim 1, wherein the system is configured to replicate an operating console of the diagnosis instrument in response to the control instruction (Peifer; col. 1, lines 47-59).

G. Claim 9 recites the system as claimed in claim 1, further comprising an acoustic input device configured to pick up a voice signal spoken at the site of the input unit of the diagnosis management system, wherein the

data processor sends the voice signal to a selected medical diagnosis instrument (Peifer; col. 4, lines 24-46 and Fig. 2).

H. Claim 10 recites the system as claimed in claim 1, wherein the system is configured to receive image data from at least one camera installed at the site of one of the diagnosis instruments, and wherein the data interface is configured for recording the image data (Peifer; col. 4, lines 24-46 and Fig. 2).

I. Claim 12 has been amended now to recite a computerized method for managing predetermined number of medical diagnosis instruments located at remote patient sites, comprising:

i. receiving at a central computer system measurement data and/or diagnosis data from the remotely located diagnosis instruments (Peifer; col. 3, line 66 to col. 4, line 13, col. 4, lines 57-63) in real time; wherein each diagnosis instrument is configured for displaying measurement data and/or diagnosis data on a local monitor allowing a local operator to monitor the diagnosis instrument at a patient site during a patient's examination;

ii. simultaneously displaying on a display unit operatively coupled to a data processor of the central computer system a number of representations of the local monitors to allow the central operator to monitor and control the remotely located diagnosis instruments <u>in real time</u> during patient examinations, wherein the number of represented local monitors corresponds to the predetermined

number of diagnosis instruments, and wherein the display unit displays the measurement data and/or diagnosis data in the same way as the respective local monitor;

iii. selecting a diagnosis instrument from the diagnosis instruments represented on the display unit for active control by the central operator when the central operator enters an input into the data processor (Peifer; col. 4, lines 66 to col. 5, line 13);

iv. converting the entered input into a control code for the selected diagnosis instrument to enable active intervention by the central operator during a patient's examination;(Peifer; col. 4, lines 66 to col. 5, line 13);

v. forwarding the control code from the central computer system to the selected diagnosis instrument (Peifer; col. 4, line 66 to col. 5, line 13); and

vi. controlling the diagnosis instrument in real time via user instructions delivered at an input unit operatively coupled to the central computer system.

(1) Peifer fails to expressly teach communication between the central computer system and the selected diagnosis instrument in real time. However, this feature is well known in the art, as evidenced by Surwit.

In particular, Surwit discloses communication between the central computer system and the selected diagnosis

instrument in real time (Surwit; col. 7, lines 15-63, col. 9, lines 50-67).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Surwit with the motivation of to identify medical emergency situations that require immediate attention (Surwit; col. 9, lines 50-67).

- The obviousness of modifying the teaching of Peifer to include receive data from the diagnosis instruments located at remote patient sites in real time (as taught by Surwit) is as addressed above in the rejection of claim 1 and incorporated herein.
- The obviousness of modifying the teaching of Peifer to include Simultaneously displaying on a display unit operatively coupled to a data processor of the central computer system a number of representations of the local monitors to allow the central operator to monitor and control the remotely located diagnosis instruments in real time during patient examinations, wherein the number of represented local monitors corresponds to the predetermined number of diagnosis instruments (as taught by Peddicord) is as

addressed above in the rejection of claim 1 and incorporated herein.

- The obviousness of modifying the teaching of Peifer to include the display unit displays the measurement data and/or diagnosis data in the same way as the respective local monitor (as taught by David) is as addressed above in the rejection of claim 1 and incorporated herein.
- The obviousness of modifying the teaching of Peifer to include displaying measurement data and/or diagnosis data on a local monitor (as taught by Oba) is as addressed above in the rejection of claim 1 and incorporated herein.

(2) Peifer fails to expressly teach each diagnosis instrument is configured for displaying measurement data and/or diagnosis data on a local monitor allowing a local operator to monitor the diagnosis instrument at a patient site during a patient's examination.

However, this feature is well known in the art, as evidenced by Oba.

In particular, Oba discloses each diagnosis instrument is configured for displaying measurement data and/or diagnosis data on a local monitor allowing a local operator to

monitor the diagnosis instrument at a patient site during a patient's examination (Oba; abstract, col. 2, lines 54-56 and fig.2). Examiner considers that since the diagnosis instruments or bedside monitors are located in an hospital or clinic environment, a local operator or a medical practitioner can monitor the instrument.

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Oba with the motivation of displaying output on a bedside monitor (col. 3, lines 12-15).

(3) Peifer fails to expressly teach controlling the diagnosis instrument in real time via user instructions delivered at an input unit operatively coupled to the central computer system. However, this feature is well known in the art, as evidenced by Surwit.

In particular, Surwit discloses controlling the diagnosis instrument in real time via user instructions delivered at an input unit operatively coupled to the central computer system (Surwit; col. 7, lines 15-63, col. 9, lines 50-67).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Surwit with the motivation of to

identify medical emergency situations that require immediate attention (Surwit; col. 9, lines 50-67).

J. Claim 13 recites the computerized method as claimed in claim 12, further comprising receiving data in dissimilar formats from at least two diagnosis instruments and processing the dissimilar format data for display in a standardized format (Peifer; col. 3, lines 40-44 and col. 3, line 66 to col. 4, line 3).

K. Claim 16 recites the computerized method as claimed in claim 12, further comprising receiving an operator voice signal and sending the voice signal to the site of the selected medical diagnosis instrument (Peifer; col. 4, lines 24-46 and Fig. 2).

L. Claim 17 recites the computerized method as claimed in claim 12.

Peifer et al. fails to expressly teach the central computer system receiving stored data saved earlier locally at one of the medical diagnosis instruments and presenting the data on the display unit. However, this feature is well known in the art, as evidenced by Surwit

In particular, Surwit discloses a central computer system receiving stored data saved earlier locally at one of the medical diagnosis instruments (Surwit, col. 3, lines 25-32) and presenting the data on the display unit (Surwit, col. 3, lines 50-53).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have combined the communicating video, voice and medical data between a central monitoring station and a patient monitoring station with the central computer system receiving stored data saved earlier locally at one of the medical diagnosis instruments with the motivation of central data processing system to obtain and analyze the obtained patient data, and to identify medical conditions requiring medical attention (Surwit, col. 2, lines 49-52).

M. Claim 18 recites the computerized method as claimed in claim 12, further comprising the central computer system receiving and recording image data from at least one camera located at a diagnosis instrument site (Peifer; col. 4, lines 24-46 and Fig. 2).

Response to Arguments

5. Applicant's arguments filed 1/24/2008 have been fully considered but they are not persuasive. Applicant's arguments will be addressed below in the order they appear.

6. In response to Applicant's argument about Peddicord does not teach "workstation 66 monitor or control remote monitoring units 10 during patient examinations"; Examiner respectfully submits that claim 1 recites "a display unit operatively coupled to the data processor and configured to represent each local

monitor simultaneously, wherein the display unit is further configured to display the measurement data and/or diagnosis data in the same way as the respective local monitor, wherein a number of represented local monitors corresponds to the predetermined number of diagnosis instruments, and wherein the simultaneous representations of local monitors on the display unit allow the central operator to monitor and control the diagnosis instruments during patient examinations", Peddicord teaches "Referring now to FIGS. 1 and 2, the monitoring unit 10 of the present invention includes a plurality of external medical monitoring devices for measuring the vital signs of the patient using the monitoring unit 10. In the embodiment of the invention shown, each of the monitoring devices is hospital-grade such that the monitoring devices provide dependable and accurate measurements." And "As can be seen in FIG. 3, multiple monitoring units 10 communicate either by a wireless communication device or conventional telephone modem with the wireless network storage unit 14, which in turn communicates with the main data collection station 12 such that the main data collection station 12 can simultaneously receive and monitor the vital signs of multiple patients." (Peddicord; col. 2, lines 35-54) Peddicord continues in col. 4, lines 19-36 that "Referring now to FIG. 4, thereshown is the internal structure of the main data collection station 12 that receives the vital sign data sent from the remote monitoring unit 10. As discussed previously, the vital sign data is transmitted by the remote monitoring unit 10 by either a wireless communication device or conventional modem to the wireless network storage unit 14. After receiving the vital sign data, the wireless network storage unit 14 can be

accessed by the main data collection station 12 through either a conventional modem connection or a TCP/IP communication link.…the main data collection station 12 is typically located in a health care facility, such as a clinic or hospital, that monitors the vital signs of numerous patients from a centralized location. The main data collection station 12 allows health care personnel to monitor the vital signs of numerous patients from a centralized location without requiring the patient or a health care worker to physically interact with each other." (Peddicord; col. 4, lines 28-36); therefore patient examination can be done remotely.

7. In response to Applicant's argument about neither Oba nor Zaitsu teach "a display unit that simultaneously displays representations of local monitors"; Examiner respectfully submits that the arguments are moot in view of the new ground(s) of rejection. David teaches "a display unit that simultaneously displays representations of local monitors" as explained in the rejection of claim 1.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not used prior art teach Remote ECG monitoring system 3986498 A, Apparatus for monitoring and signalling system 4259548 A, Home medical surveillance system 4838275 A, Home medical system and medical apparatus for use therewith 5339821 A, Transportable modular patient monitor 5375604 A, Home health care system which employs a two-way community antenna television network to permit communication between a doctor and patients at different locations 5434611 A, Programmable

monitoring system and method 5438607 A, Ambulatory patient health monitoring techniques utilizing interactive visual communication 5441047 A, Intelligent remote visual monitoring system for home health care service 5553609 A, Patient monitor and support system 5558638 A, Medical alert distribution system with selective filtering of medical information 5576952 A, Delivery of medical services using electronic data communications 5619991 A, Portable patient monitor reconfiguration system 5640953 A, Flexible patient monitoring system featuring a multiport transmitter 5687734 A, Remote site medical intervention system 5810747 A, Computer-based surgical services management system 5842173 A, Medical care schedule and record aiding system and method 5913197 A, Device for producing a display from monitored data 5912656 A, Medical patient vital signs-monitoring apparatus 5931791 A, Remote access medical image exchange system and methods of operation therefor 6006191 A, Portable remote patient telemonitoring system 6416471 B1, Intuitive user interface and control circuitry including linear distance measurement and user localization in a portable ultrasound diagnostic device 6436040 B1, Patient monitor for determining a probability that a patient has acute cardiac ischemia 20020133087, Distance-treatment through public network 20030074227, Personal medical monitoring unit and system 6579231 B1.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DILEK B. COBANOGLU whose telephone number is (571)272-8295. The examiner can normally be reached on 8-4:30.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher L. Gilligan can be reached on 571-272-6770. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. B. C./
Examiner, Art Unit 3626

/Robert Morgan/
Primary Examiner, Art Unit 3626